#### **EMPLOYMENT TRAINING PANEL**

# Memorandum

To: Panel Members Date: 10/23/2003

From: Diana Torres, Manager Analyst: R. Negrete

Subject: One-Step Agreement for **Textron Fastening Systems - Santa Ana** 

# **CONTRACTOR:**

• Training Project Profile: Retraining: companies w/out-of-state competition

Legislative Priorities:
 Stimulating Exports/Imports Moving to a High

Performance Workplace, Promotion of California's Manufactuing Workforce

Type of Industry: Manufacturing

Repeat Contractor: Yes

Contractor's Full-Time Employees

➤ Worldwide: 49,000

N/A

➤ In California: 1.475

• ETP Trainees Represented by Union: No

Name and Local Number of Union

Representing ETP Trainees:

# **CONTRACT:**

Program Costs: \$70,928

Substantial Contribution: \$0

Total ETP Funding: \$70,928

Total In-kind Contribution: \$84,680

➤ Trainee Wages Paid During Training: \$84,680

➤ Other Contributions: \$0

Reimbursement Method: Fixed-Fee

• County(ies) Served: Orange

## **INTRODUCTION:**

Textron Fastening Systems - Santa Ana (Textron) qualifies for standard Employment Training Panel (ETP) funding as an industrially classified manufacturer facing out-of-state competition, under Title 22, California Code of Regulations, Section 4416(b). Textron proposes to retrain 88 California workers to continue its transition to a high performance workplace begun in their first ETP Agreement. Textron representatives state that the proposed continuous improvement and business skills training will enable the company to improve productivity to remain a viable California aerospace supplier.

#### MEETING ETP GOALS AND OBJECTIVES

Textron proposes training that will further the following ETP goals and objectives:

- 1) As an aerospace supplier, Textron proposes a training program for eighty-eight of its employees that will meet ETP's legislative mandate to foster the retention of manufacturing jobs within the state.
- 2) Training is targeted to meet the needs for a skilled workforce in the aerospace industry, in which companies face strong competition outside California. This project thereby meets ETP's legislative mandate to foster job retention in industries threatened by out-of-state competition.
- 3) The training is targeted to frontline workers earning high wages, thereby meeting ETP's legislative mandate to invest in developing the skills of frontline workers in high skilled, high wage occupations within the state.
- 4) This project meets ETP's legislative mandate to develop frontline workers with skills that prepare them for the high performance workplace of the future.

# **TRAINING PLAN TABLE:**

Grp/Trainee Type	Types Of Training	No. Retain	No. Class/Lab Videocnf. Hrs.	No. CBT Hrs.		st Per ainee	Hourly Wage After 90 Days		
Retrainees Job Number 1	Continuous Improvement Business Skills	88	24 - 200	-0-	Cos	6 erage st per nee	*\$11.74 - \$63.94		
Prevalent Hourly Wage \$19.80  Average Cost Per Trainee \$806									
* Health Benefits Used To Meet ETP Minimum Wage:  * Health benefits of at least \$.19 per hour will be applied to the base wage in order to meet the ETP minimum hourly wage of \$11.74 for Orange County for Job Number 1.						,	% Of Mgrs & Supervisors To Be Trained:		
Other Employee Benefits: life insurance, tuition reimbursement program, company savings plan, employee assistance program.									

# **COMMENTS/ISSUES:**

#### > Frontline Workers

Eighty six (98 per cent) of the 88 of the proposed trainees in this project meet the Panel definition of frontline worker under Title 22, California Code of Regulations (CCR), Section 4400(ee). Two (two percent) of the proposed retrainees are managers.

#### > Production During Training

Contractor agrees that during ETP-funded training hours, trainees will not produce products or provide services that will ultimately be sold.

#### PROPOSED ACTION:

Staff recommends that the Panel approve this One-Step Agreement, if funding is available, and the project meets the Panel priorities.

#### NARRATIVE:

Textron Fastening Systems - Santa Ana (TFS), a subsidiary of Textron, Inc. produces integrated aerospace fasteners for the highly competitive aerospace industry. It has four product lines: threaded fasteners, engineered products, blind fasteners, and automation systems. According to applicant's representatives, TFS must continuously improve product quality and production processes to provide on-time delivery and value to their aerospace customers. In addition, aerospace suppliers are facing increased cost cutting by the Department of Defense and aerospace companies, that are mandating 25 percent cost reductions in the price they will pay for company products. Further, aerospace suppliers in other states and off shore are undercutting prices to their customers, thereby cutting into the company's profits, reducing sales, and impairing its ability to expand its business.

TFS conducted an internal audit of its business operations in June 2003, and discovered that company production processes needed to be improved. Another audit finding included insufficient manufacturing resources and outdated production processes resulting in lost business, as TFS was unable to deliver products on time, and wasteful manufacturing procedures caused bottlenecks and large blocks of employee downtime. In response, TFS has installed a Maxibolt product line that can ensure improved quality and delivery standards.

These new manufacturing processes will require increasing the skill levels of company employees. TFS will implement a high performance workplace devoted to providing quality products that are delivered on time and to the customer's satisfaction. These quality-oriented processes will allow TFS to maintain relationships with crucial clients like Boeing.

TFS has targeted areas requiring significant and immediate improvement to achieve the company's process improvement goals. Through ETP-funded training, the proposed Contractor will be able to reduce manufacturing lead times, eliminate waste, reduce variability and increase output production

One-Step Agreement October 23,2003

# **NARRATIVE**: (continued)

Company and vendor trainers have developed a 24-200 hour curriculum made up of continuous improvement and business skills training for 88 production, administrative support, engineers and management staff. The continuous improvement training includes: incorporating the principles of Lean Manufacturing, reducing set-up time, improving product flow between processes and process areas, increasing quality, and eliminating waste. Internal Kaizen events will enable TFS to establish more acceptable lead times and realize their potential for greater production efficiencies. The proposed training will empower retrainees with the decision-making skills that will allow them to positively impact the way they design and manufacture fasteners, and to incorporate Six Sigma and Lean training in company production processes. The business skills training will provide communication skills and interpersonal skills training. Two manager trainees will be provided continuous improvement training, as they will lead the implementation of the continuous improvement process.

#### Supplemental Nature of Training

Panel Legislation requires that ETP funds be used to supplement, rather than displace, funds available through existing programs conducted by employers and government-funded programs.

Company funded training consists of fundamental and job-specific skills training, safety, and new-hire orientation training that was provided primarily on an individual basis. Company will continue to provide this ongoing training at its own expense following the conclusion of the ETP contract. Estimated annual expenditures for company funded training is \$75,000.

In the first ETP project production techniques, office automation and design of experiments skills were provided, as TFS was to begin the implementation of a high performance workplace. However, because of a corporate reorganization and restructuring of company operations, that resulted in significant layoffs at the Santa Ana TFS plant, only limited problem-solving techniques and limited team leadership concepts were incorporated on the manufacturing floor for the twenty buyer planners and manufacturing specialist trainees that were retained.

Company funded training in the period after the first ETP project focused on improving the basic skills of Textron frontline workers including targeted measurement skills, terminology and blueprint reading to create a standardized production skill level.

Continuous improvement/six sigma/kaizen and business skills training are being provided in this proposal, which is different from the training provided in the first ETP Agreement. Also there are different training occupations included in this training proposal. Only 20 trainees from the first ETP training will be trained in this second proposal. Two significant differences in this proposal are that, 1) training is more clearly mapped out and refined to specifically target continuous improvement measures; and 2) this training initiative reflects the growth and evolution of TFS Six Sigma and combines those tools and methodologies with production improvements effected by innovative Kaizen Event training. In addition, employment has stabilized at the Santa Ana TFS plant and no further decreases in the workforce are foreseen.

## **SUBCONTRACTORS:**

Heim Group, of Pacific Palisades, CA - in an amount not to exceed \$8,500 to provide a portion of Business Skills and Continuous Improvement Class/Lab training

Singijutsu West LLC, of Aliso Viejo, California – in an amount not to exceed \$35,000 to provide a portion of Continuous Improvement Class/Lab training

#### **THIRD PARTY SERVICES:**

The Marquis Group of Volente, Texas provided assistance in conducting the training needs assessment, development of the training plan, curriculum and other application requirements at no cost to the Contractor.

#### PRIOR PROJECTS:

The following are completed project statistics for ETP Agreements with this Contractor within the last five years:

PRIOR PROJECTS									
Agreement Number	Term	Location (City)	% Earned	Planned In-kind Contribution	Reported In kind Contribution				
ET09-0951	2/1/99 – 1/31/01	Santa Ana	7%	N/A	*N/A				

As reported by TFS representatives, project performance was affected by a corporate reorganization that resulted in layoff of 45 employees and the reassignment of enrolled trainees to other jobs. As a result, only 21 of the enrolled 129 trainees completed all training and the 90-day retention period. Company employment has stabilized since 2002.

\*Employer in-kind contributions were not required to be identified or reported in December 1998, when this Agreement was approved. However, TFS estimates that the in-kind contribution was at least 100 percent of the amount earned.

# TEXTRON FASTENING SYSTEMS – SANTA ANA CURRICULUM

# Hours Class/Lab

24 – 200 Trainees will be provided any of the following:

# **BUSINESS SKILLS**

Communication Skills Interpersonal Skills

# CONTINUOUS IMPROVEMENT

Teambuilding Problem Solving

Green Belt Classroom

Define

Create Project Definition
Select Customer Requirement
Data Collection Planning

#### Measure

Validate Y Measurement System
Establish Baseline Capability
Define Performance Objectives
Identify Sources of Variation and Waste

#### Analyze

Graphical Analysis of Family Variation Statistical Analysis of Variation Analyze Process Flow

#### **Improve**

Identify Solution
Validate Solution
Plan Improvements
Implement Improvements

# TEXTRON FASTENING SYSTEMS – SANTA ANA CURRICULUM

#### Control

Develop Control Strategy Implement Process Controls Determine Final Process Capability Monitor Project Performance Over Time

## Kaizen Event – Shingijutsu

Just-In-Time Lean Production Method
Process Control and Standardization
Organize and Clean Work Space
Reduce Inventory
System Diagram of Quality Assurance
Optimize Capital Resources
Set Procedures and Implement Standards
Streamline Service Delivery Process
Waste Reduction
Improve Floor Layout for Increased Flexibility and Efficiency

# Set-up Reduction Kaizen

Down-time Reduction Minimize Lead Times In-Process Gauging Supplier Development

#### 5S Kaizen

Point of Use Storage Workstation Design Improving Functional Layout One-Piece Flow

## Flow Kaizen

Pull System
One-Piece Pull
Establish Flow Lines
Value Stream Organizations